

Pesticide Safety *Information*

Worker Health and Safety Branch

Series A

A-6 SUMMARY OF WORKER SAFETY REGULATIONS FOR THE AGRICULTURAL SETTING CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 3, DIVISION 6

The pesticide worker safety regulations specify safe work practices for employees who handle pesticides or work in treated areas. The term "handle" refers to any activity related to the application of pesticides. Handle includes mixing, loading, applying, repairing or cleaning contaminated equipment, and handling unrinsed containers. The Department of Pesticide Regulation and the local agricultural commissioner enforce the worker safety regulations. Important requirements of the regulations follow.

Employer/Employee Responsibilities (CCR 6702):

Your employer must:

- know the regulations and requirements on pesticide label
- tell you, in a language you understand, about the pesticides used, pesticide safety hazards, personal protective equipment required, other equipment used, work procedures, and pesticide safety regulations
- ensure that their employees work safely and follow all safety rules.

Employees must:

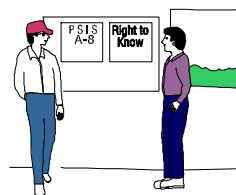
- use the personal protective equipment (PPE)
- follow safety rules in regulations and on pesticide labeling.

Hazard Communication (CCR 6723, 6723.1, 6761, 6761.1):

Hazard communication ensures that you know the hazards you may face and what to do to protect yourself from those hazards. Through proper hazard communication, you will know about the hazards, safe work practices and where records are kept. Pesticide Safety Information Series (PSIS) leaflets A-8 and A-9 are the written hazard communication programs for handlers and field workers, respectively.

Your employer must display PSIS A-8 and A-9 for you to read. Your employer must also display the following for pesticide handlers and field workers to read:

- identification of the treated area
- time and date of applications
- restricted entry interval (REI)
- pesticide product name, active ingredient and EPA registration number.



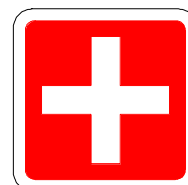
Your employer must make available:

- Material Safety Data Sheets (MSDS), if available, for the pesticides used
- PSIS leaflets applicable to the use situation.

Training (CCR 6724, 6764, 6770):

Employees who handle pesticides must receive adequate training in the use of pesticides. Training must occur before the employee begins to handle pesticides. Handlers must receive refresher training each year. Training of handlers must include the following for each pesticide or group of chemically similar pesticides (such as organophosphates):

- the meaning of information on the pesticide label concerning human health effects
- hazards of the pesticide, including acute and long term effects
- pesticide poisoning symptoms
- routes pesticides can enter the body
- emergency first aid
- how to get emergency medical care
- routine and emergency decontamination procedures
- need, limitations, use and cleaning of PPE



FIRST AID

- prevention, recognition and first aid for heat-related illnesses
- safety requirements for handling pesticides
- environmental concerns
- warnings about taking pesticides home
- regulatory requirements, MSDS, and PSIS
- purpose and requirements of medical supervision, when applicable
- location of the written hazard communication program, PSIS leaflets and MSDSs
- your rights as an employee.

Once training is received, then you must sign the training record. Handler training records must be kept at the work headquarters.

Field workers must receive training every 5 years; and must receive training before working in treated fields. The training must include:

- importance of routine washing after exposure
- the meaning of posting and REIs
- where exposure to pesticides might occur
- routes of exposure
- acute and long term effects of pesticides
- symptoms of overexposure
- first aid and where to get emergency medical care
- warnings about taking pesticides home
- the hazard communication program
- your rights as an employee.



You have the right to receive information about pesticides to which you may be exposed (or it can be given to your physician). You cannot be fired for exercising your rights.

Labels and Other Warnings (CCR 6602, 6618, 6674, 6678, 6776):

Pesticide labels must be available at the work site. If pesticides are transferred from their original container, the new container must be labeled with the identity of the pesticide, the signal word from the product label and the name of the person or firm responsible.

Before applying pesticides, the applicator must notify the farmer of the application before it takes place. The notice must include:

- date and time of the application
- name, EPA registration number and active ingredient of the pesticide used
- safety precautions required by label or regulations
- location of the area to be treated
- the REI.

The farmer is responsible for warning employees and contractors who may enter or walk within ¼ mile of a treated area. The warning must include:

- location of the treated area
- any REI
- instructions not to enter the field until the REI expires.

The farmer may substitute posting of the treated field for the oral warning, if the label does not require both oral warnings and field posting.

Use Records (CCR 6624, 6728, 6778):

Records of when and where pesticides were used must be kept for pesticides used on agricultural crops. The employer must have records of employee exposure to organophosphate and N-methyl carbamate pesticides used in the production of an agricultural crop. For each person, these records must show the name of the pesticide and the date of the exposure.

Emergency Medical Care (CCR 6726, 6766):

Your employer must make prior arrangements for emergency medical care, and tell you the location of the medical facility in case someone is sick or injured on the job. If you handle pesticides, your employer must post at the work site (or on the work vehicle if there is no fixed work site) the name, address and telephone number of the physician, clinic or emergency room able to provide care. Your employer must make sure that you are taken to a medical care facility if you become injured or ill while handling pesticides or exposed to pesticide residues on the job.

Medical Supervision (CCR 6728):

Your employer must provide medical supervision that includes periodic cholinesterase blood tests, if all the following conditions are met:

- you mix, load or apply organophosphate or N-methyl carbamate pesticides

- the pesticides are used on agricultural crops
- the pesticides have signal word "DANGER" or "WARNING" on the label
- you use these pesticides for more than 6 days in a 30-day period.

PSIS A-11 provides a complete explanation of medical supervision.

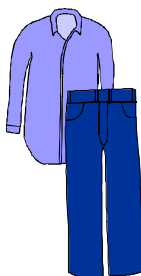
Decontamination & Hygiene (CCR 6732, 6734, 6793):

If you handle pesticides used on agricultural crops, your employer must provide enough water, soap and towels for routine washing of your hands and face. In addition, for emergencies, water must be available at the mix/load site and within ¼ mile of other handlers to flush your eyes and wash your body. Store wash water separate from water used for mixing with pesticides. Handlers must carry (or it can be on the application vehicle) one pint of water for emergency eye flushing, if the label requires the use of eye protection.

Your employer must provide a place to wash and change clothing after work, if you handle pesticides.

Coveralls (CCR 6736, 6793):

Your employer must provide clean coveralls (1- or 2-piece garment that covers your body, except the head, hands and feet) each day you handle pesticides having the signal word "DANGER" or "WARNING" on the label or any minimal exposure pesticide. Your employer must wash those coveralls.



Engineering Controls (CCR 6742, 6746, 6793):

Engineering controls are methods used to reduce exposure (closed system, enclosed cab, etc.) other than personal protective equipment (respirators, gloves, etc.). Handlers may substitute protective clothing when using certain engineering controls. See PSIS A-3 for further explanation of engineering controls and allowed substitutions.

All application equipment must be inspected prior to use. Your employer must make any necessary

repairs prior to use. Tanks on pesticide equipment must have covers to prevent spills.

Employees who mix and load liquid pesticide products or liquid mixes of pesticide products with the signal word "DANGER" or any minimal exposure pesticide must use closed systems. When loading pesticides with the signal word "DANGER" or "WARNING," the loading hose must have a shut-off device on the end to prevent spills when the hose is removed from the application vehicle tank.

Personal Protective Equipment (CCR 6738, 6793):

Your employer must provide all necessary personal protective equipment (PPE) and ensure it is clean and in proper repair. You must not take PPE home to be washed. Generally, the necessary PPE is listed on label of the pesticide used. However, in California there are additional requirements that may not appear on labels.

Eye protection - Eye protection is required in the following situations:

- when stated on the label
- mixing/loading
- ground application, except when injecting or incorporating pesticides into the soil, working in an enclosed cab or when spray nozzles are located below you and pointed downward
- hand application, except application of vertebrate baits, using solid fumigants, baiting insect monitoring traps or applying non-insecticidal lures;
- adjusting, cleaning or repairing pesticide-handling equipment
- flagging, except when in an enclosed cab.



Eye protection can include safety glasses (with front, brow and temple protection), goggles, face shield, or a full-face mask as part of respiratory protection. Regular eyeglasses or sunglasses **DO NOT** meet this requirement.

Gloves - Gloves must be worn when:

- required by the pesticide label
- mixing and loading
- all hand application activities (except vertebrate pest control using long-handled tools).

- adjusting, cleaning or repairing contaminated equipment

Gloves must be replaced or washed every day. It is especially important that gloves be washed on the inside and the outside, since residue can accumulate inside. DO NOT use leather or cotton gloves, unless expressly permitted by the pesticide label.

Respiratory Equipment - When respiratory protection is required, your employer must adopt written procedures for selecting, fitting, cleaning and maintaining the equipment. A physician must evaluate employees with certain medical conditions, such as heart or lung disease, before being assigned to this kind of work. Respiratory protection is more fully explained in PSIS A-5.



Chemical Resistant Clothing - Pesticides with unusual hazards require the use of chemical resistant suits, footwear, head covering and/or apron. However, use of this kind of clothing in warm temperatures may result in heat stress. Since the hazards of the pesticide will not allow its use without this kind of protection, the following rule applies if wearing the chemical resistant suit: Employees are prohibited from using pesticides with this clothing requirement when the temperature is above 80°F during the day or 85°F at night unless they are provided with cooled chemical suits. Some substitutions are allowed for chemical resistant clothing when using engineering controls (see PSIS A-3).

Cleaning/Repairing Equipment (CCR 6744):

If you clean or repair pesticide-handling equipment, you must be fully informed of and protected from the hazards of working on that equipment.

Employee Contact (CCR 6730):

An employee working alone with pesticides having the signal word "DANGER" on the label must have contact with another person at least once every two hours during the day and once every hour at night.

Fumigants (CCR 6780, 6782, 6784):

Fumigants are pesticides used as a gas. A permissible exposure level (PEL) has been set for most fumigants. These PELs must not be exceeded.

It is your employer's responsibility to know that you are not being overexposed or to provide you with approved respiratory protection. Where fumigants are used, your employer must have an accident response plan that tells you what to do in case of a spill, leak or fire. You must know what is in the plan.

You cannot detect some fumigants by odor, taste, irritation or sight. For these fumigants, your employer must know or anticipate possible exposure from routine work activities. This is done by monitoring the actual work site or using information from previous monitoring of similar procedures and situations. This will show your employer that one of three situations exist:

- your exposure does not exceed the PEL, in which case no respiratory protection is required
- your exposure will exceed the PEL, in which case approved respiratory protection is required
- your exposure is variable (that is, there are times when the levels exceed the PEL and times when it does not).

You must wear approved respiratory protection all of the uncertain times, unless there is continuous monitoring at the work site. If there is continuous monitoring, respiratory equipment is necessary only when monitors indicate air levels are over the PEL.

Two trained persons must be present when fumigating enclosed spaces. Warning signs must be posted prior to the fumigation of enclosed spaces. Two trained persons also need to be present during field fumigation with methyl bromide and during tarp removal (if used).

Restricted Entry Interval (CCR 6770, 6772, 6774):

A restricted entry interval (REI) is the period of time, following a pesticide application, when people are not allowed to go into the treated field for picking (hand-harvesting), thinning, weeding, tying, pruning, limb propping or similar work. REIs for many pesticides are stated on pesticide labels; others are established by regulation. Both must be observed.

Reentry for activities with no contact, such as operating tractors, is allowed if special protection is used to prevent exposure to residues. People incorporating pesticides into the soil during a REI

must wear the same PPE required for the applicator. People may enter the field during the REI for limited contact activities, such as irrigation, provided certain conditions are met. Those conditions include:

- both oral warning and field posting are not required by the label
- it has been at least 4 hours since the application
- inhalation exposure is below acceptable levels
- exposure is minimal and limited to the feet, lower legs, hands and forearms
- the person is wearing PPE required for early entry workers
- they do not work in treated fields for more than 8 hours
- the need for the activity is unforeseen.

Early Entry Requirements (CCR 6771):

If you enter a field prior to the expiration of the REI, you must be informed of the requirements on the label relating to:

- health hazards
- first aid
- symptoms of poisoning
- use of PPE required
- symptoms and first aid for heat-related illness
- the need for washing when out of the treated area.

Your employer must provide PPE required for early entry. You must not take PPE home to clean it; cleaning is the responsibility of your employer. One pint of water for eye flushing must be immediately accessible for each employee, if the pesticide label requires eye protection. Employers must provide early entry workers with soap, water and towels to wash when they remove their PPE.

Minimal Exposure Pesticides (CCR 6790-6793):

The following pesticides are on the minimal exposure pesticide (MEP) list:

- propargite (Omite[®], Comite[®])
- folpet
- bromoxynil (Buctril[®])
- oxydemeton-methyl (Metasystox[®]-R).

The hazards of using these pesticides require special safety rules regardless of the toxicity category of the pesticide. These rules are:

- a change area must be provided
- washing facilities must be at all mix/load sites
- clean work clothing must be provided each day
- a closed system must be used for liquid pesticides or liquid dilutions of pesticides
- employees who handle MEPs must wear clean or new chemical resistant suits (except when using some engineering controls - see PSIS A-3)
- respiratory protection must be used when applying by hand or ground (except when using some engineering controls).

Exemptions:

If you work for a licensed pest control adviser or a registered professional forester and you received adequate training, are informed about any application and know how to contact your employer, the following provisions of the worker safety regulations do not apply: decontamination, emergency medical care, coveralls, personal protective equipment and field reentry.

The provisions of the worker safety regulations related to handlers do not apply if you use consumer products and your exposure is similar to expected consumer exposure.

You may examine a complete set of these regulations at your local county agricultural commissioner's office.

This leaflet assists readers in understanding pesticide regulations. It is not a legal document. The legal reference is found in the California Code of Regulations, Title 3. The words "must" and "should" used in the text are not the same. The word "must" means the action is required and comes from California regulations. The word "should" means additional handling practices that are recommended to further reduce exposure.